

**AGREEMENT BETWEEN
THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA
AND THE POWER REACTOR AND NUCLEAR FUEL DEVELOPMENT
CORPORATION IN THE FIELD OF
NUCLEAR TECHNOLOGIES**

The Department of Energy (DOE) of the United States of America and the Power Reactor and Nuclear Fuel Development Corporation (PNC) (hereinafter referred to as the "Parties"):

Recognizing that the United States of America and Japan are parties to the Treaty on the Non-Proliferation of Nuclear Weapons and;

Noting that the Parties have cooperated under the terms of an Agreement in the Field of Liquid Metal-Cooled Fast Breeder Reactors signed on March 4, 1969, and subsequently amended by the Agreements of January 31, 1979 and January 11, 1991, and;

Wishing to continue the close and long-term cooperation in the field of nuclear technologies;

Have agreed as follows:

ARTICLE 1

1. Cooperation between the Parties in the conduct of programs associated with nuclear technologies shall be directed towards finding solutions to mutually agreed problems, and to exchanging information developed during the resolution of these problems. This cooperation may include exchange of experience and results of theoretical, experimental, and conceptual design programs; and agreed research and development projects. Cooperation between the two Parties shall be on the basis of mutual benefit, equality, and reciprocity.
2. Cooperation under this Agreement shall be carried out subject to the Agreement for Cooperation Between the Government of the United States of America and the Government of Japan Concerning Peaceful Uses of Nuclear Energy, signed November 4, 1987 (hereinafter the Agreement for Cooperation) and to the laws and regulations of the respective countries.
3. In accordance with paragraph 1 of Article 8 of the Agreement for Cooperation, any technology transferred or acquired pursuant to this agreement shall be used only for peaceful purposes.

ARTICLE 2

The areas of cooperation in nuclear technologies covered by this Agreement may include the following:

1. Reactor neutronics analysis and experimentation, to include reactor and plant shielding and nuclear data;
2. Reactor and plant safety, including safety issues relating to foreign-designed reactors;
3. Fuels and materials, to include structural, component, absorber and circuit materials, and fuels which could tend to reduce or eliminate the production of material directly usable in nuclear explosive devices;
4. Nuclear steam supply systems and their associated components, to include component and system design, instrumentation and control, thermal hydraulics, structural analysis, and architectural design;
5. Quality assurance and non-destructive practices;
6. Economic and environmental considerations;
7. Reactor life extension;
8. Reactor decontamination and decommissioning, including fuel treatment and storage;
9. Nuclear material transportation, including shipping casks;
10. Irradiation technology, including isotope production with use of advanced production techniques;
11. Fissile material treatment technology;
12. Advanced nuclear technology, including application of computer science; and
13. Such other areas of cooperation as may be added by agreement of the Parties.

ARTICLE 3

Cooperation under this Agreement may include but is not limited to the following forms:

1. Exchange of scientists, engineers, and other specialists for agreed periods of time for participation in experiments, analysis, design, and other research, development and

demonstration activities at scientific centers, nuclear reactor facilities, laboratories, engineering offices, and other facilities of the Parties or of contractors of the Parties;

2. Exchange or provision of samples, materials, instruments, and components for experiments, testing, and evaluation;
3. Exchange of information and data on scientific and technical activities, including results and methods of research and development;
4. Organization of, and participation in, seminars, workshops, and other meetings on research and development problems in the areas listed in Article 2;
5. Short-term visits by specialist teams or individual staff to the nuclear reactor facilities and non-nuclear test facilities in support of the programs of the other Party, subject to the prior written agreement on each occasion of the Receiving Party;
6. The use by one Party of the facilities owned or operated by the other Party. Such use of facilities shall be the subject of separate agreements between the Parties;
7. Joint projects in which the Parties agree to share the work and/or costs. In accordance with Article 5, each such joint project shall be the subject of a separate Specific Memorandum of Agreement between the Parties; and
8. Such other specific forms of cooperation may be agreed by the Parties and approved by the Joint Coordinating Committee.

ARTICLE 4

1. To supervise the execution of this Agreement, a DOE/PNC Joint Coordinating Committee on Cooperation on nuclear technologies shall be established. The Joint Coordinating Committee shall consist of up to ten members, half of whom shall be appointed by each Party. This Committee shall meet each year alternately in the United States and in Japan, or at other agreed times and places. The Head of the Delegation of the Receiving Party shall act as Chairman during meetings of the Committee. In addition, each Party shall have the right to invite advisors to such meetings, as necessary.
2. At its meetings, the Joint Coordinating Committee shall evaluate the status of cooperation under this Agreement. This evaluation shall include an assessment of the balance of exchange in the various areas of cooperation listed in Article 2 and, if necessary, a consideration of measures required to correct any imbalances.

3. For the detailed management of the cooperation, joint working groups shall be appointed by the Joint Coordinating Committee to cover cooperation undertaken in each of the areas listed in Article 2. Each joint working group shall agree on specific plans for cooperation in its respective area, within guidelines and policy set by the Joint Coordinating Committee. Each joint working group shall be responsible for the working contacts and exchanges between the Parties in their respective areas of cooperation.
4. At least once a year each joint working group shall report on its cooperative activities since the previous meeting of the Joint Coordinating Committee, and shall propose for acceptance a program of cooperation for the next 12 months.

ARTICLE 5

The Parties shall conclude a Specific Memorandum of Agreement for each joint project which they agree to undertake pursuant to Article 3(7). Each such Memorandum of Agreement shall be subject to and form an integral part of this Agreement and shall contain provisions on technical scope, management, costs, cost sharing, schedule, and, as appropriate, intellectual property rights.

ARTICLE 6

1. The Parties shall exchange, as agreed on a mutually beneficial basis, scientific and technical information documents and results of research and development of related work carried out under this Agreement. Such information shall be limited to that which they have the right to disclose, either in their possession or available to them, from the technical areas described in Article 2. The Parties shall not exchange or transfer under this Agreement "Restricted Data" or "Sensitive Nuclear Technology", as defined by Article I of the Agreement for Cooperation.
2. PNC shall provide DOE with abstracts in English of reports or other information on Japan's nuclear technology programs. Payment for translation will be decided by the Parties on a case-by-case basis.
3. Seminar proceedings and reports of joint activities carried out under this Agreement shall be published as joint publications, as mutually agreed by the Parties.
4. The information developed and exchanged under this Agreement should be given wide distribution. Such information, except as noted in Article 7 of this Agreement, may be made available to the public by either Party through customary channels and in accordance with normal procedures of the Parties.

5. Copyrights of either Party or of cooperating organizations and persons shall be accorded treatment consistent with internationally recognized standards of protection. As to copyrights of material within the scope of Article 7 owned or controlled by a Party, each Party shall make efforts to grant to the other a license to reproduce copyrighted materials.
6. The application or use of any information exchanged or transferred between the Parties under this Agreement shall be the responsibility of the Party receiving it, and the transmitting Party does not warrant the suitability of such information for any particular use or application.
7. Details and procedures for the protection and distribution of intellectual property rights and other rights of a "business confidential" nature are set forth in Article 7. Article 7 is applicable to any cooperative activities under this Agreement, except as otherwise specifically agreed by the Parties in a Specific Memorandum of Agreement or otherwise. Such Memoranda of Agreement also may elaborate upon the provisions of Article 7.

ARTICLE 7

1. Business-Confidential Information

A. For the purpose of this Agreement, "business-confidential" information means any know-how, technical data, or technical, commercial, or financial information that is developed outside this Agreement and that meets all of the following conditions:

- (i) It is a type customarily held in confidence for commercial reasons;
- (ii) It is not generally known or publicly available from other sources;
- (iii) It has not been previously made available by the owner to others without an obligation concerning its confidentiality; and
- (iv) It is not already in the possession of the recipient without an obligation concerning its confidentiality.

B. Any business-confidential information shall be furnished or transferred only by written agreement of the Parties and shall be given full protection in accordance with the laws and regulations of their respective countries.

C. Any business-confidential information will be appropriately identified before it is furnished in the course of the cooperative activities under this Agreement. Responsibility for identifying such information will fall on the Party which furnishes it or asserts that it is to be protected. Unidentified information will be assumed not to be information to be protected, except that a Party may notify the other Party in writing, within a reasonable period of time after furnishing or transferring such information, that such information is business-confidential information under the laws and regulations of its country. Such information will thereafter be protected in accordance with paragraph B above.

2. Ownership of Intellectual Property Rights

Between each Party and nationals of its country, the ownership of intellectual property rights will be determined in accordance with its national laws, regulations, and practices.

3. Inventions

A. For the purpose of this Agreement, "Invention" means any invention made in the course of the cooperative activities under this Agreement which is or may be patentable or otherwise protected under the laws of the United States of America, Japan, or any third country.

B. As to an Invention, the Parties shall take appropriate steps, in accordance with the national laws and regulations of the respective countries, with a view to realizing the following:

- (i) If an Invention is made as a result of a cooperative activity under this Agreement that involves only the transfer or exchange of information between the Parties, such as by joint meetings, seminars, or the exchange of technical reports or papers, unless otherwise provided in an applicable implementing arrangement:
 - (a) the Party whose personnel make the Invention (hereinafter referred to as "the Inventing Party") or the personnel who make the Invention (hereinafter referred to as "the Inventor") have the right to obtain all rights and interests in the Invention in all countries, and
 - (b) in any country where the Inventing Party or the Inventor decides not to obtain such rights and interests, the other Party has the right to do so.

- (ii) If the Invention is made by an Inventor of a Party ("the Assigning Party") while assigned to another Party (the "Receiving Party") in the course of programs of a cooperative activity that involve only the visit or exchange of scientists and engineers, and:
 - (a) in the case where the Receiving Party is expected to make a major and substantial contribution to the programs of the cooperative activity:
 - i. the Receiving Party has the right to obtain all rights and interests in the Invention in all countries, and
 - ii. in any country where the Receiving Party decides not to obtain such rights and interests, the Assigning Party or the Inventor has the right to do so;
 - (b) in the case where the provision in sub-paragraph (a) above is not satisfied:
 - i. the Receiving Party has the right to obtain all rights and interests in the Invention in its own country and in third countries,
 - ii. the Assigning Party or the Inventor has the right to obtain all rights and interest in the Invention in its own country, and,
 - iii. in any country where the Receiving Party decides not to obtain such rights and interests, the Assigning Party or the Inventor has the right to do so.
- (iii) Specific arrangements involving other forms of the cooperative activities, such as joint research projects with an agreed research work scope, will provide for the mutually agreed upon disposition, on an equitable basis, of rights to the Invention made as a result of such activities.
- (iv) The Inventing Party will disclose promptly the Invention to the other Party and furnish any documentation or information necessary to enable the other Party to establish rights to which it may be entitled. The Inventing Party may ask the other Party in writing to delay publication or public disclosure of such documentation or information for the purpose of protecting its rights or the rights of the Inventor related to the Invention. Unless otherwise agreed in writing, such restrictions will not exceed a period of six months from the date of communication of such documentation or information.

4. Copyrights

Disposition of rights to copyright-protected works created in the course of the cooperative activities under this Agreement will be determined in the relevant implementing arrangements. Each Party shall take appropriate steps to secure copyrights to works created in the course of the cooperative activities under this Agreement in accordance with its national laws and regulations.

5. Other Forms of Intellectual Property

For those other forms of intellectual property created in the course of the cooperative activities under this Agreement which are protected under the laws of either country, disposition of rights shall be determined on an equitable basis, in accordance with the laws and regulation of the respective countries.

6. Cooperation

Each Party shall take all necessary and appropriate steps, in accordance with the laws and regulations of its country, to provide for the cooperation of its authors and inventors which are required to carry out the provisions of this agreement. The Parties assume the sole responsibility for any award or compensation that may be due its personnel in accordance with the laws and regulations of its country, provided, however, that this Agreement creates no entitlement to any such award or compensation.

ARTICLE 8

The following provisions shall apply to the provision or exchange of equipment for use in joint projects, or in other projects as mutually agreed:

1. The Sending Party shall supply as soon as possible a detailed list of the equipment to be provided together with the relevant specifications and technical and informational documentation.
2. The equipment and necessary spare parts supplied by the Sending Party for use in joint projects shall remain its property and shall be returned to the Sending Party upon completion of the joint project unless otherwise agreed.
3. Equipment shall be brought into operation at the host establishment only by mutual agreement of the Parties or between their senior representatives at the host establishment.

4. The host establishment shall provide the necessary premises for the equipment, and shall provide for electric power, water, gas, and other utility services, in accordance with technical requirements which shall be as mutually agreed.
5. The Sending Party shall be responsible and pay the expenses for the transport of equipment and materials by plane or ship to an authorized port of entry in the Receiving Party convenient to the ultimate destination, return shipment from the port of entry, and for safekeeping and insurance en route.
6. The Receiving Party shall be responsible for safekeeping and insurance en route from the authorized port of entry to the ultimate destination and return to the port of entry.
7. Equipment provided by the Sending Party for carrying out joint projects shall be considered to be scientific, not having a commercial character.

ARTICLE 9

The following provisions shall apply to assignment or exchanges of staff:

1. Each Party shall ensure that qualified staff are selected for assignment to the other Party. Each exchange of staff shall be the subject of a separate agreement between the Parties.
2. The Assigning Party shall be responsible for its staff's salaries, insurance and allowances. The Assigning Party also shall pay for the travel and living expenses of its staff while on assignment to the Receiving Party unless otherwise agreed in writing.
3. The Receiving Party shall arrange for adequate accommodations for assigned staff and their families on a mutually agreeable, reciprocal basis.
4. The Receiving Party shall provide all necessary assistance to assigned staff and their families as regards administrative formalities.
5. Assigned staff shall conform to the general rules of work and safety regulations in force at the Receiving Party's establishment, unless otherwise agreed in separate attachment-of-staff agreements.

ARTICLE 10

1. Except when the Parties otherwise agree in writing, each Party shall bear the costs of its participation in the activities under this Agreement.

2. Cooperation under this Agreement shall be conducted according to the international obligations, laws and regulations of the Parties and shall be subject to the availability of personnel and funds.
3. Any questions of interpretation or implementation relating to this Agreement arising during its term shall be resolved by agreement of the Parties.

ARTICLE 11

1. This Agreement shall enter into force upon signature, and remain in force until January 31, 2000, and may be extended or amended by mutual agreement of the Parties, provided that the Agreement for cooperation remains in force.
2. This Agreement may be terminated at any time by either Party, upon one year's advance notification in writing. Such termination shall be without prejudice to the rights which may have accrued under this Agreement to either Party up to the date of such termination.
3. Joint activities not completed at the termination of this Agreement may, if agreed by the Parties, be continued until their completion under the terms of the Agreement.
4. This Agreement shall, as of entry into force, replace and supersede the Agreement between the United States Department of Energy and the Power Reactor and Nuclear Fuel Development Corporation of Japan in the Field of Liquid Metal Cooled Fast Breeder Reactors signed on January 11, 1991.

Done at Tokyo, in duplicate, in the English language, this 11 day of April, 1995.

FOR THE DEPARTMENT OF ENERGY
OF THE UNITED STATES OF AMERICA:



FOR THE POWER REACTOR AND
NUCLEAR FUEL DEVELOPMENT
CORPORATION:

